

AMENDED CLAIM SET:

1. (currently amended) A powdered core which is made by compacting of a mixture of iron powder and resin powder, wherein

said iron powder is composed of atomized iron powder and 5 to 50% by mass of reduced iron powder, and

said resin powder is ~~at least one member selected from the group consisting of thermosetting polyimide powder and~~ a mixture of both thermosetting polyimide powder and polytetrafluoroethylene powder, wherein said thermosetting polyimide powder is 0.10 to 0.15% by mass relative to the total quantity of said ~~powder~~ mixture of iron powder and resin powder.

2. (currently amended) The powdered core as claimed in Claim 1, which is made by compacting of said mixture of iron powder and resin powder, ~~wherein said resin powder is thermosetting polyimide powder.~~

3. (cancelled).

4. (cancelled).

5. (original) The powdered core as claimed in Claim 1, which is made by compacting of said mixture of iron powder and resin powder, wherein said iron powder contains 5 to 50% by mass of reduced iron powder and said resin powder is a mixture of both thermoplastic polyimide powder and polytetrafluoroethylene powder of 0.3% by mass or less relative to the total quantity of said powder mixture.

6. (currently amended) A method for producing powdered cores, which comprises the steps of:

mixing together atomized iron powder and reduced iron powder in the ratio of 95 : 5 to 30 : 70 % by mass as represented by (the former : the latter), particle surfaces of both of said iron powders being coated with a phosphate compound,

further adding to said iron powder mixture ~~at least one member selected from the group consisting of thermosetting polyimide and~~ a mixture of both thermosetting polyimide and polytetrafluoroethylene,

then subjecting the thus formed mixture to compacting with a compacting die, the wall surfaces of which being coated by a lubricant, to obtain a green compact, and

subjecting said green compact to heat treatment, and optionally, further subjecting the heat-treated product to machining of sizing, cutting, or grinding.

7. (new) A powdered core which is made by compacting of a mixture of iron powder and resin powder, wherein

said iron powder is composed of atomized iron powder and 5 to 50% by mass of reduced iron powder, and

said resin powder is a mixture of both thermosetting polyimide powder and polytetrafluoroethylene powder, wherein said thermosetting polyimide powder is 0.10 to 0.15% by mass relative to the total quantity of said powder mixture and the content of polytetrafluoroethylene is three-fourths or less relative to said mixture of iron powder and resin powder.

8. (new) The powdered core as claimed in Claim 1, which is made by compacting of said mixture of iron powder and resin powder.

9. (new) The powdered core as claimed in Claim 1, which is made by compacting of said mixture of iron powder and resin powder, wherein said iron powder contains 5 to 50% by mass of reduced iron powder and said resin powder is a mixture of both thermoplastic polyimide powder and polytetrafluoroethylene powder of 0.3% by mass or less relative to the total quantity of said powder mixture.

10. (new) A method for producing powdered cores, which comprises the steps of:

mixing together atomized iron powder and reduced iron powder in the ratio of 95 : 5 to 30 : 70 % by mass as represented by (the former : the latter), particle surfaces of both of said iron powders being coated with a phosphate compound,

further adding to said iron powder mixture a mixture of both thermosetting polyimide and polytetrafluoroethylene, wherein the content of polytetrafluoroethylene is three-fourths or less relative to said mixture of resin powder,

then subjecting the thus formed mixture to compacting with a compacting die, the wall surfaces of which being coated by a lubricant, to obtain a green compact, and

subjecting said green compact to heat treatment, and optionally, further subjecting the heat-treated product to machining of sizing, cutting, or grinding.